Zak Kipling

List of Publications by Year
in descending order

29 papers	1,716 citations	430754 18 h-index	501076 28 g-index
87 all docs	87 docs citations	87 times ranked	2726 citing authors

#	Article	IF	Citations
1	The CAMS reanalysis of atmospheric composition. Atmospheric Chemistry and Physics, 2019, 19, 3515-3556.	1.9	524
2	Challenges in constraining anthropogenic aerosol effects on cloud radiative forcing using present-day spatiotemporal variability. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 5804-5811.	3.3	120
3	AeroCom phase III multi-model evaluation of the aerosol life cycle and optical properties using ground- and space-based remote sensing as well as surface in situ observations. Atmospheric Chemistry and Physics, 2021, 21, 87-128.	1.9	96
4	Description and evaluation of aerosol in UKESM1 and HadGEM3-GC3.1 CMIP6 historical simulations. Geoscientific Model Development, 2020, 13, 6383-6423.	1.3	83
5	What controls the vertical distribution of aerosol? Relationships between process sensitivity in HadGEM3â€"UKCA and inter-model variation from AeroCom Phase II. Atmospheric Chemistry and Physics, 2016, 16, 2221-2241.	1.9	82
6	Constraints on aerosol processes in climate models from vertically-resolved aircraft observations of black carbon. Atmospheric Chemistry and Physics, 2013, 13, 5969-5986.	1.9	79
7	The importance of vertical velocity variability for estimates of the indirect aerosol effects. Atmospheric Chemistry and Physics, 2014, 14, 6369-6393.	1.9	73
8	Description and evaluation of the tropospheric aerosol scheme in the European Centre for Medium-Range Weather Forecasts (ECMWF) Integrated Forecasting System (IFS-AER, cycle 45R1). Geoscientific Model Development, 2019, 12, 4627-4659.	1.3	71
9	On the characteristics of aerosol indirect effect based on dynamic regimes in global climate models. Atmospheric Chemistry and Physics, 2016, 16, 2765-2783.	1.9	67
10	Current state of the global operational aerosol multiâ€model ensemble: An update from the International Cooperative for Aerosol Prediction (ICAP). Quarterly Journal of the Royal Meteorological Society, 2019, 145, 176-209.	1.0	66
11	Wet scavenging limits the detection of aerosol effects on precipitation. Atmospheric Chemistry and Physics, 2015, 15, 7557-7570.	1.9	46
12	Uncertainty from the choice of microphysics scheme in convection-permitting models significantly exceeds aerosol effects. Atmospheric Chemistry and Physics, 2017, 17, 12145-12175.	1.9	46
13	An aerosol climatology for global models based on the tropospheric aerosol scheme in the Integrated Forecasting System of ECMWF. Geoscientific Model Development, 2020, 13, 1007-1034.	1.3	40
14	Evaluation of climate model aerosol trends with ground-based observations over the last 2Âdecades â€" an AeroCom and CMIP6 analysis. Atmospheric Chemistry and Physics, 2020, 20, 13355-13378.	1.9	38
15	Community Intercomparison Suite (CIS) v1.4.0: a tool for intercomparing models and observations. Geoscientific Model Development, 2016, 9, 3093-3110.	1.3	33
16	Ensembles of Global Climate Model Variants Designed for the Quantification and Constraint of Uncertainty in Aerosols and Their Radiative Forcing. Journal of Advances in Modeling Earth Systems, 2019, 11, 3728-3754.	1.3	33
17	Aerosol absorption in global models from AeroCom phase III. Atmospheric Chemistry and Physics, 2021, 21, 15929-15947.	1.9	27
18	Models transport Saharan dust too low in the atmosphere: a comparison of the MetUM and CAMS forecasts with observations. Atmospheric Chemistry and Physics, 2020, 20, 12955-12982.	1.9	24

#	Article	IF	Citations
19	Dynamic subgrid heterogeneity of convective cloud in a global model: description and evaluation of the Convective Cloud Field Model (CCFM) in ECHAM6â€“HAM2. Atmospheric Chemistry and Physics, 2017, 17, 327-342.	1.9	21
20	A global modelâ€“measurement evaluation of particle light scattering coefficients at elevated relative humidity. Atmospheric Chemistry and Physics, 2020, 20, 10231-10258.	1.9	19
21	Revisiting the relationship between Atlantic dust and tropical cyclone activity using aerosol optical depth reanalyses: 2003â€“2018. Atmospheric Chemistry and Physics, 2020, 20, 15357-15378.	1.9	19
22	How Well Can We Represent the Spectrum of Convective Clouds in a Climate Model? Comparisons between Internal Parameterization Variables and Radar Observations. Journals of the Atmospheric Sciences, 2018, 75, 1509-1524.	0.6	15
23	Representing model uncertainty for global atmospheric CO₂ flux inversions using ECMWF-IFS-46R1. Geoscientific Model Development, 2020, 13, 2297-2313.	1.3	14
24	Quantification of methane emissions from hotspots and during COVID-19 using a global atmospheric inversion. Atmospheric Chemistry and Physics, 2022, 22, 5961-5981.	1.9	11
25	Description and evaluation of the tropospheric aerosol scheme in the Integrated Forecasting System (IFS-AER, cycle 47R1) of ECMWF. Geoscientific Model Development, 2022, 15, 4881-4912.	1.3	8
26	Evaluation of ECMWF IFS-AER (CAMS) operational forecasts during cycle 41r1â€“46r1 with calibrated ceilometer profiles over Germany. Geoscientific Model Development, 2021, 14, 1721-1751.	1.3	4
27	The Use of Satellite Data in the Copernicus Atmosphere Monitoring Service (Cams). , 2018, , .		3
28	Spatiotemporal Behavior of the TIGGE Medium-Range Ensemble Forecasts. Monthly Weather Review, 2011, 139, 2561-2571.	0.5	2
29	Global response of parameterised convective cloud fields to anthropogenic aerosol forcing. Atmospheric Chemistry and Physics, 2020, 20, 4445-4460.	1.9	2